WHAT IS CLAIMED IS:

1. A luminous display device with an increased active display area, comprising:

a first and second circular plates fused at an outer edge and having an overall diameter (D_O);

a recess provided on an inner surface of at least one of the first and second plates to define an active display portion having a diameter (D_A) surrounded by an outer rim with a width (W);

a layer of beads held in position in the recess by the first and second fused plates and the outer rim;

an ionizable gas filling a volume of the recess around the layer of beads;

an electrode in communication with the ionizable gas; and

a power supply for providing a high frequency voltage applied to the electrode for creating a lightning-like effect, which is visible in the active display portion of the recess, in the ionizable gas as multiple discharge paths through the layer of beads;

wherein the diameter (D_A) of the active display is defined by D_O-2W and is at least 90% of the overall diameter (D_O).

2. The device as recited in Claim 1, wherein the width (W) of the outer rim falls with in a range of .35 to .6 inches.

3. The device as recited in Claim 1, wherein the layer of beads is coated with a colored phosphorescent material.

4. The device as recited in Claim 1, wherein the layer of beads is coated with a plurality of colored phosphorescent materials.

5. The device as recited in Claim 1, wherein a housing of the power supply has a circular shape.

6. The device as recited in Claim 5, wherein the housing of the power supply is symmetrically fixed at a center of one of the first and second plates.

7. The device as recited in Claim 1, wherein a diameter of each of the beads substantially equals a height of the recess.

8. The device as recited in Claim 1, wherein each plate has a recess.

9. A method of providing a luminous display device with an increased active display area, comprising:

providing a first and second circular plates having an overall diameter (D_O);

creating a recess on an inner surface of at least one of the first and second plates to define an active display portion having a diameter (D_A) surrounded by an outer rim with a width (W);

filling the recess with a layer of beads;

fusing the first and second plates to each other at an outer edge thereof;

filling a volume of the recess around the layer of beads with an ionizable gas;

installing an electrode in communication with the ionizable gas; and

providing a high frequency voltage applied to the electrode for creating a lightning-like effect, which is visible in the active display portion of the recess, in the ionizable gas as multiple discharge paths through the layer of beads;

wherein the diameter (D_A) of the active display is defined by D_O-2W and is at least 90% of the overall diameter D_O.

10. The method as recited in Claim 9, wherein the width (W) of the outer rim falls with in a range of .35 to .6 inches.

11. The method as recited in Claim 9, further comprising the step of coating the layer of beads with a colored phosphorescent material.

12. The method as recited in Claim 9, further comprising the step of coating the layer of beads with a plurality of colored phosphorescent materials.

13. The method as recited in Claim 9, further comprising the step of creating a recess in both plates.

14. A luminous display device with an increased active display area, comprising:

a first and second circular plates fused at an outer edge and having an overall radius (r_o);

a recess provided on an inner surface of at least one of the first and second plates to define an active display portion having a radius (r_a) surrounded by an outer rim;

a layer of beads held in position in the recess by the first and second fused plates and the outer rim;

an ionizable gas filling a volume of the recess around the layer of beads;

an electrode in communication with the ionizable gas; and

a power supply for providing a high frequency voltage applied to the electrode for creating a lightning-like effect, which is visible in the active display portion of the recess, in the ionizable gas as multiple discharge paths through the layer of beads;

wherein the active display area is defined by ($A_A=\Pi r_a^2$) and is at least 75-80% of an overall display area defined by ($A_O=\Pi r_o^2$).

15. The device as recited in Claim 14, wherein the layer of beads is coated with a colored phosphorescent material.

16. The device as recited in Claim 14, wherein the layer of beads is coated with a plurality of colored phosphorescent materials.

17. The device as recited in Claim 14, wherein a housing of the power supply has a circular shape.

18. The device as recited in Claim 17, wherein the housing of the power supply is symmetrically fixed at a center of one of the first and second plates.

19. The device as recited in Claim 1, wherein a diameter of each of the beads substantially equals a height of the recess.

20. The device as recited in Claim 1, wherein each plate has a recess.